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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,732

12/15/2005

Felipe Martinez

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The Dow Chemical Company
Intellectual Property Section
P.O. Box 1967
Midland, MI 48641-1967

EXAMINER

YAGER, JAMES C

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

04/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,732	Applicant(s) MARTINEZ, FELIPE	
	Examiner JAMES YAGER	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9,11-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) 15,16 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 11-14, 17, 18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed 29 January 2009 has been entered. Claims 1-6, 8, 9, 11-14, 17, 18 and 20-22 are currently pending in the application.
2. In light of the amendments to the claims, all prior rejections under 35 USC §102 have been withdrawn.

Election/Restrictions

3. Applicant's election without traverse of Group I in the reply filed on 29 January 2009 is acknowledged.
4. Claims 15, 16 and 23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 29 January 2009.

Claim Objections

5. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is

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required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 8 requires that the blend comprises 50 percent or more LLDPE (which includes amounts greater than 90%) which is broader than claim 1 that requires that the blend comprises 10-90% LLDPE.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-6, 8, 9, 11-18 and 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2-6, 8, 9, 11-18 and 20-23, the scope of the claims is confusing given that each claim refers to "The sheet of claim 1", however, claim 1 is drawn to a film not a sheet. Therefore, it is not clear whether the claims are drawn to a sheet or a film.

Regarding claim 11, the scope of the claim is confusing because it depends on a cancelled claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-6, 8, 9, 11-14, 17, 18 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kelch (US 5,000,992), as evidenced by Chen et al. (US 5,286,525) and Esneault et al. (WO 96/16122).

Regarding claims 1-6, 8, 9, 11-14, 17, 18 and 20-22, Kelch discloses a multilayer film 3-10mils thick (C2/L45-50) consisting essentially of a foamed layer comprising 10-90% LLDPE and 10-90% LDPE (i.e. a foamed polyolefin sheet) (C3/L30-40) that comprises 60-90% of the film thickness (i.e. 1.8-9 mils thick) (C3/L45-55), wherein the LLDPE is LLDPE 4047 (C10/L20-30) having a density of 0.917 g/cc and a MI of 2.3 g/10 min (as evidenced by Chen et al. C4/L40-45) and the LDPE is LDPE 681 (C10/L20-30) having a density of 0.922 g/cc and a MI of 5.52 g/10 min (as evidenced by Esneault et al. P11/L15-20).

Given that the foamed layer of Kelch is made of the same materials in the same proportions and of the same thickness as the instantly claimed invention, it is clear that the foamed layer will possess identical properties i.e. having an MD tear strength of at least 150 gr/mil; the MD tear strength is greater than 350 gr/mil; the oxygen vapor transmission is 2.18 gr/mil/100 in.sq*24 hr; the layer has a density reduction of at least

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20 percent compared to a non foamed layer of the same composition; having an MD tear strength of at least 50gr/mil.

Given that Kelch does not disclose that the foamed layer is crosslinked, it is the examiner's position that the polyolefin has substantially no crosslinking.

Although Kelch does not disclose that the foam layer has been made using a land length to die gap ratio of less than 25, or has been made using a blow up ratio of from about 2.2 to about 4.0 as claimed, it is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

Therefore, absent evidence of criticality regarding the presently claimed the foamed layer has been made using a land length to die gap ratio of less than 25, or has been made using a blow up ratio of from about 2.2 to about 4.0 and given that Kelch meets the requirements of the claimed sheet, Kelch clearly meets the requirements of present claims 12, 13, 21 and 22.

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While it is recognized that the phrase “consisting essentially of” narrows the scope of the claims to the specified materials and those which do not materially affect the basic and novel characteristics of the claimed invention, absent a clear indication of what the basic and novel characteristics are, “consisting essentially of” is construed as equivalent to “comprising”. Further, the burden is on the applicant to show that the additional ingredients in the prior art, i.e. a non-foamed layer, would in fact be excluded from the claims and that such ingredients would materially change the characteristics of the applicant’s invention, See MPEP 2111.03.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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12. Claims 12 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Kelch (US 5,000,992), as evidenced by Chen et al. (US 5,286,525) and Esneault et al. (WO 96/16122), as applied to claims 1 and 17 above, in further view of Hughes et al. (US 3,963,403).

Regarding claims 12 and 21, modified Kelch discloses all of the claim limitations as set forth above. Kelch does not specifically disclose that the foam layer is made using a land length to die gap ratio of less than 25.

Hughes discloses a pipe made from foam plastic (C1/L13-15) that is made using a low land length to die gap ratio, optimally 2:1 (C2/L45-55). Hughes discloses that the low land length to die gap ratio prevents foaming upstream of the outlet and provides a stronger and leak resistant wall (C1/L48-51).

Kelch and Hughes are analogous art because they both teach about articles made of foamed plastic. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the land length to die gap ratio of 2 as disclosed by Hughes in the process of making the film of Kelch to provide a film that is stronger and leak resistant.

Response to Arguments

13. Applicant's arguments filed 29 January 2009 have been fully considered but they are not persuasive. Applicant argues:

Claims 1-14 and 17-22 are rejected under 35 USC 102(b) as being anticipated by Kelch (US 5,000,992) as evidenced by Chert et al (US 5,286,525) and Esneault et

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al. (WO 96/16122). At column 3, lines 45-47, Kelch expressly states that coextrusion of a foamed polyolefin layer with at least one solid (i.e., non-foamed) layer is needed in order to obtain overall composite strength. Despite this clear teaching of Kelch, Applicants have found that if the right blend is chosen for the foamed film layer, adequate strength can be obtained despite not having a solid layer. Applicants have amended the claims to recite the preferred blend and to eliminate films containing solid layers. Accordingly, Kelch no longer anticipates the present claims.

While it is recognized that the phrase “consisting essentially of” narrows the scope of the claims to the specified materials and those which do not materially affect the basic and novel characteristics of the claimed invention, absent a clear indication of what the basic and novel characteristics are, “consisting essentially of” is construed as equivalent to “comprising”. Further, the burden is on the applicant to show that the additional ingredients in the prior art, i.e. a non-foamed layer, would in fact be excluded from the claims and that such ingredients would materially change the characteristics of the applicant’s invention, See MPEP 2111.03.

14. Applicant's arguments filed 29 January 2009 have been fully considered but they are not persuasive. Applicant argues:

Claims 12 and 21 stand rejected under 35 USC 102(b) as being anticipated by Kelch (US 5,000,992) as evidenced by Chert et al (US 5,286,525) and Esneault et al. (WO 96/16122) in further view of Hughes et. al (US 3,963,403). Hughes does not teach the blends now claimed, nor does it teach thin foamed film layers without a solid support layer. Accordingly it is respectfully requested that this rejection also be withdrawn.

Note that while Hughes does not disclose all the features of the present claimed invention, Hughes is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept,

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namely a low land length to die gap ratio, optimally 2:1, and in combination with the primary reference, discloses the presently claimed invention.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YAGER whose telephone number is (571)270-3880. The examiner can normally be reached on Mon - Thurs, 7:30am-5pm, EST, Alt. Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY 3/26/09

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794